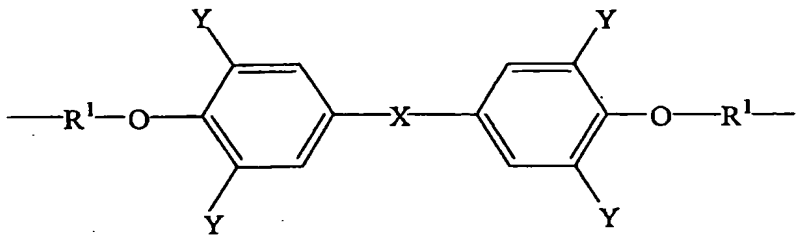
ABSTRACT

A photosensitive resin composition for optical waveguide formation, comprising:

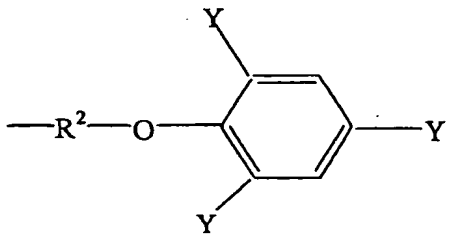
(A) a di(meth)acrylate having the structure represented by the following general formula (1):



(1)

(wherein R^1 is $-(OCH_2CH_2)_m-$, $-(OCH(CH_3)CH_2)_m-$, or $-OCH_2CH(OH)CH_2-$; X is $-C(CH_3)_2-$, $-CH_2-$, $-O-$, or $-SO_2-$; Y is a hydrogen atom or a halogen atom; m is an integer of 0 to 4);

(B) a mono(meth)acrylate having the structure represented by the following general formula (2):



(2)

(wherein R^2 is $-(OCH_2CH_2)_p-$, $-(OCH(CH_3)CH_2)_p-$, or $-OCH_2CH(OH)CH_2-$; Y is a hydrogen atom, a halogen atom, $Ph-C(CH_3)_2-$, Ph-, or an alkyl group having 1 to 20 carbon atoms; p is an integer of 0 to 4; Ph is a phenyl group); and

(C) a photoradical polymerization initiator. The composition has excellent patterning ability, refractive index, heat resistance, and transmission characteristic.